6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ– OAR–2019–0588; FRL-10016-40-OAR]

Alternative Method for Calculating Off-cycle Credits Under the Light-duty Vehicle Greenhouse Gas Emissions Program: Applications from Nissan North America, Inc.

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: EPA is requesting comment on applications from Nissan North America, Inc., (Nissan) for off-cycle carbon dioxide (CO_2) credits under EPA's light-duty vehicle greenhouse gas emissions standards. "Off-cycle" emission reductions can be achieved by employing technologies that result in real-world benefits, but where that benefit is not adequately or entirely captured on the test procedures used by manufacturers to demonstrate compliance with emission standards. EPA's light-duty vehicle greenhouse gas program acknowledges these benefits by giving automobile manufacturers several options for generating "off-cycle" carbon dioxide (CO_2) credits. Under the regulations, a manufacturer may apply for CO_2 credits for technologies that result in off-cycle benefits. In these cases, a manufacturer must provide EPA with a proposed methodology for determining the real-world off-cycle benefit. Nissan has submitted applications that describe methodologies for determining off-cycle credits from low-power-consumption compressor clutch technology. The application for compressor clutch technology includes test data to establish the 0.3 grams CO2/mile credit value compared to the industry standard clutch with similar performance characteristics (circa 2012). Nissan's application is limited to 2017 and later model year vehicles. Pursuant to applicable regulations, EPA is making descriptions of the manufacturers' off-cycle credit calculation methodologies available for public comment.

DATES: Comments must be received on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**

ADDRESSES: Submit your comments referencing Docket ID No. EPA–HQ– OAR–2019–0588, to the Federal eRulemaking Portal: http://www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: David Wright, Environmental Protection Specialist, Office of Transportation and Air Quality, Compliance Division, U.S. Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105. Telephone: (734) 214–4467. Fax: (734) 214–4869. Email address: wright.davida@epa.gov.

SUPPLEMENTARY INFORMATION:

I. Background

EPA's light-duty vehicle greenhouse gas (GHG) program provides three pathways by which a manufacturer may accrue off-cycle carbon dioxide (CO_2) credits for those technologies that achieve CO_2 reductions in the real world but where those reductions are not adequately or entirely captured on the test used to determine compliance with the CO_2 standards, and which are not otherwise reflected in the standards' stringency. The first pathway is a predetermined list of

credit values for specific off-cycle technologies that may be used beginning in model year 2014.[1] This pathway allows manufacturers to use conservative credit values established by EPA for a wide range of technologies, with minimal data submittal or testing requirements. In cases where additional laboratory testing can demonstrate emission benefits, a second pathway allows manufacturers to use a broader array of emission tests (known as "5-cycle" testing because the methodology uses five different testing procedures) to demonstrate and justify off-cycle CO_2 credits.[2] The additional emission tests allow emission benefits to be demonstrated over some elements of real-world driving not captured by the GHG compliance tests, including high speeds, hard accelerations, and cold temperatures. Credits determined according to either of these methodologies do not undergo additional public review. The third and last pathway allows manufacturers to seek EPA approval to use an alternative methodology for determining the off-cycle CO_2 credits.[3] This option is only available if the benefit of the technology cannot be adequately demonstrated using the 5-cycle methodology. Manufacturers may also use this option for model years prior to 2014 to demonstrate off-cycle CO_2 reductions for technologies that are on the predetermined list, or to demonstrate reductions that exceed those available via use of the predetermined list.

Under the regulations, a manufacturer seeking to demonstrate off-cycle credits with an alternative methodology (i.e., under the third pathway described above) must describe a methodology that meets the following criteria:

- Use modeling, on-road testing, on-road data collection, or other approved analytical or engineering methods;
- Be robust, verifiable, and capable of demonstrating the real-world emissions benefit with strong statistical significance;

[1] See 40 CFR 86.1869-12(b).
[2] See 40 CFR 86.1869-12(c).
[3] See 40 CFR 86.1869-12(d).

- Result in a demonstration of baseline and controlled emissions over a wide range of driving conditions and number of vehicles such that issues of data uncertainty are minimized;
- Result in data on a model type basis unless the manufacturer demonstrates that another basis is appropriate and adequate.

Further, the regulations specify the following requirements regarding an application for off-cycle CO_2 credits:

- A manufacturer requesting off-cycle credits must develop a methodology for demonstrating and determining the benefit of the off-cycle technology, and carry out any necessary testing and analysis required to support that methodology.
- A manufacturer requesting off-cycle credits must conduct testing and/or prepare engineering analyses that demonstrate the in-use durability of the technology for the full useful life of the vehicle.
- The application must contain a detailed description of the off-cycle technology and how it functions to reduce CO_2 emissions under conditions not represented on the compliance tests.
- The application must contain a list of the vehicle model(s) which will be equipped with the technology.
- The application must contain a detailed description of the test vehicles selected and an engineering analysis that supports the selection of those vehicles for testing.
- The application must contain all testing and/or simulation data required under the regulations, plus any other data the manufacturer has considered in the analysis.

Finally, the alternative methodology must be approved by EPA prior to the manufacturer using it to generate credits. As part of the review process defined by regulation, the alternative

methodology submitted to EPA for consideration must be made available for public comment.[4] EPA will consider public comments as part of its final decision to approve or deny the request for off-cycle credits.

II. Off-Cycle Credit Applications

Using the alternative methodology approach discussed above, Nissan is applying for credits for model years 2017 and later. Nissan has applied for off-cycle credits using the alternative demonstration methodology pathway for the low-power-consumption clutch technology. The application covers 2017 model year and later vehicles. The methodologies described by Nissan are generally consistent with those used by other manufacturers to determine similar credit values. The requested credit value is 0.3 grams CO2/mile.

III. EPA Decision Process

EPA has reviewed the applications for completeness and is now making the applications available for public review and comment as required by the regulations. The off-cycle credit applications submitted by Nissan (with confidential business information redacted) have been placed in the public docket (see ADDRESSES section above) and on EPA's web site at https://www.epa.gov/ve-certification/compliance-information-light-duty-greenhouse-gas-ghg-standards. EPA is providing a 30-day comment period on the applications for off-cycle credits described in this notice, as specified by the regulations. The manufacturers may submit a written rebuttal of comments for EPA's consideration, or may revise an application in response to comments. After reviewing any public comments and any rebuttal of comments submitted by manufacturers, EPA will make a final decision regarding the credit requests. An EPA decision regarding these off-cycle credit requests will only apply to the vehicles and model years specified in the applications submitted by each manufacturer. EPA will make its decision available to the public by placing a decision document (or multiple decision documents) in the docket and on EPA's web site at https://www.epa.gov/ve-certification/compliance-information-

[4] See 40 CFR 86.1869-12(d)(2).

light-duty-greenhouse-gas-ghg-standards. An EPA decision to approve off-cycle credit requests would only apply to the manufacturers, model years, vehicles, and technologies specified in the credit applications. Such decision would not apply to other vehicles or vehicles from other manufacturers. While the broad methodologies used by these manufacturers could potentially be used for other vehicles and by other manufacturers, the vehicle specific data needed to demonstrate the off-cycle emissions reductions would likely be different. In such cases, a new application would be required, including an opportunity for public comment.

Dated: November 10, 2020.

Byron Bunker,

Director, Compliance Division,

Office of Transportation and Air Quality,

Office of Air and Radiation.

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